

TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

ETAS ID: TM438575

SUBMISSION TYPE:	NEW ASSIGNMENT		
NATURE OF CONVEYANCE:	RELEASE OF SECURITY INTEREST		
CONVEYING PARTY DATA			
Name	Formerly	Execution Date	Entity Type
BANK OF AMERICA, N.A., AS ADMINISTRATIVE AGENT FOR LENDERS		08/07/2017	National Banking Association: UNITED STATES
RECEIVING PARTY DATA			
Name:	CALIX, INC.		
Street Address:	1035 N. MCDOWELL BLVD		
City:	PETALUMA		
State/Country:	CALIFORNIA		
Postal Code:	94954		
Entity Type:	Corporation: DELAWARE		
PROPERTY NUMBERS Total: 9			
Property Type	Number	Word Mark	
Registration Number:	4064466	E3	
Registration Number:	4151481	B6	
Registration Number:	3839295	E7	
Registration Number:	3802134	E5	
Registration Number:	3303025	C7	
Registration Number:	2707608		
Registration Number:	2789178	CALIX	
Registration Number:	1357966	OCCAM	
Registration Number:	1356286	OCCAM	
CORRESPONDENCE DATA			
Fax Number:	4048853900		
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>			
Phone:	4048853868		
Email:	rusty.close@troutmansanders.com		
Correspondent Name:	CHRISTOPHER CLOSE		
Address Line 1:	TROUTMAN SANDERS LLP		
Address Line 2:	600 PEACHTREE STREET NE, SUITE 5200		
Address Line 4:	ATLANTA, GEORGIA 30308-2216		

CH \$240.00 4064466

TRADEMARK

ATTORNEY DOCKET NUMBER:	220763.002369
NAME OF SUBMITTER:	Christopher Close
SIGNATURE:	/Christopher Close/
DATE SIGNED:	08/09/2017

Total Attachments: 21

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RELEASE OF SECURITY INTEREST IN INTELLECTUAL PROPERTY

THIS RELEASE OF SECURITY INTEREST IN INTELLECTUAL PROPERTY (the “**Release**”) is made as of the 7 day of August, 2017, by BANK OF AMERICA, N.A., as Administrative Agent for Lenders (the “**Assignee**”). Capitalized terms not defined herein have the meaning assigned them in the Agreements (as defined below).

WHEREAS, CALIX, INC., a Delaware corporation (“**Assignor**”), the Guarantors, the Lenders party thereto and Assignee entered into that certain (i) Credit Agreement, and (ii) Security and Pledge Agreement, each dated as of July 29, 2013 (in each case, as amended, supplemented, or otherwise modified from time to time, the “**Agreements**”), for the purpose of securing certain obligations of Assignor to Assignee arising under the Agreements;

WHEREAS, pursuant to the Agreements, and the (i) Notice of Grant of Security Interest in Patents, dated July 29, 2013 and recorded with the U.S. Patent and Trademark Office on July 29, 2013 at Reel/Frame No. 030899/0597 and (ii) Notice of Grant of Security Interest in Trademarks, dated July 29, 2013, and recorded with the U.S. Patent and Trademark Office on July 29, 2013 at Reel/Frame No. 005080/0719, the Assignor granted the Assignee, for the benefit of the Lenders, a security interest in all of the Patents, Trademarks, Copyrights, and Mask Works (as defined in the Agreements) (collectively referred to hereinafter as the “**Intellectual Property**”), including the Patents, Trademarks, Copyrights, and Mask Works identified on Exhibits A, B, C, and D attached hereto, and pledged and mortgaged (but did not transfer title to) the Intellectual Property to Assignee; and

WHEREAS, the Assignee’s obligations to make credit extensions under the Agreements have been terminated, and the Assignee is therefore willing to release its security interest in the Intellectual Property.

NOW, THEREFORE, for valuable consideration, receipt of which is hereby acknowledged, and pursuant to the terms and conditions set forth in the Agreements:

The Assignee hereby terminates and releases its security interest in the Intellectual Property, including without limitation, the Intellectual Property identified on the exhibits attached hereto, and the Assignee hereby assigns and transfers to Assignor, without any representation, warranty, or recourse whatsoever, the Assignee’s entire right, title, and interest in and to the Intellectual Property, effective as of the date set forth above.

The Assignee hereby agrees to execute such further instruments and documents and perform such further acts as the Assignor may reasonably deem necessary to secure to the Assignor the rights herein conveyed.

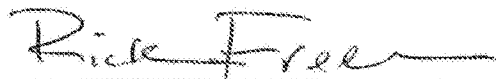
This Release may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one and the same instrument.

[Signature page follows]

IN WITNESS WHEREOF, the Assignee has caused this Release to be executed as of the date first above written.

“ASSIGNEE”

BANK OF AMERICA, N.A.,
as Administrative Agent

By: 
Name: RICK FREEMAN
Title: SVP

[Signature Page to Release of Security Interest in Intellectual Property]

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TRADEMARK
REEL: 006126 FRAME: 0244

EXHIBIT A – PATENTS

Description	Application Number	Registration Number
Fiber Guide Connected to a Heat Sink Fastener		6,661,663 (12/09/2003)
Faceplate with Integrated Light-Pipe		6,692,132 (02/17/2004)
Heat Sink with a Cutout		6,728,103 (04/27/2004)
Angled Connector		6,793,521 (09/21/2004)
Concurrent Switching of Synchronous and Asynchronous Traffic		6,798,784 (09/28/2004)
Optical Network Restoration		6,952,395 (10/04/2005)
Arbiter for an Input Buffered Communication Switch		6,954,811 (10/11/2005)
Space Reuse During Technology Upgrade in a Protection Area of an Outdoor Enclosure		6,980,725 (12/27/2005)

Description	Application Number	Registration Number
Traffic Merging System		7,006,497 (02/28/2006)
Network Address Assignment in a Passive Optical Network		7,020,157 (03/28/2006)
Backplane Bus		7,035,294 (04/26/2006)
N to One and One to One Equipment Protection Switching		7,058,011 (06/06/2006)
Asynchronous Receive and Transmit Packet Crosspoint		7,068,672 (06/27/2006)
Connection Rearrangement in Communication Switches		7,187,672 (03/06/2007)
Methods, Devices and Computer-Readable Storage Media for Passive Optical Network Address Association Recovery		7,318,096 (01/08/2008)
Network Address Assignment in a Passive Optical Network		7,525,980 (04/28/2009)

Description	Application Number	Registration Number
Backplane Bus		7,551,650 (06/23/2009)
Merging Multiple Data Flows in a Passive Optical Network		7,586,920 (09/08/2009)
Network Interface Device Communication via Power Line		7,652,390 (01/26/2010)
Pluggable Optical Diplexer/Triplexer Module		7,664,405 (02/16/2010)
Traffic Management for a Passive Optical Network Terminal		7,672,233 (03/02/2010)
Network Interface Device Enclosure		7,672,450 (03/02/2010)
Merging Multiple Network Data Flows		7,843,939 (11/30/2010)
Traffic Management For A Passive Optical Network Terminal		7,848,343 (12/07/2010)

Description	Application Number	Registration Number
Method, Device and Computer-Readable Storage Medium for Network Address Association Recovery		7,895,318 (02/22/2011)
Communication Between Network Interface Device And Subscriber Devices Via Power Supply Lines		7,923,855 (04/12/2011)
Efficient Management of Ring Networks		8,004,966 (08/23/2011)
Applying Adaptive Thresholds to Multicast Streams within Computer Networks		8,121,124 (02/21/2012)
Upgrade Resilient Multi-Transport Optical Network Terminal		8,139,605 (03/20/2012)
Network Interface Device Communication via Power Line		8,212,375 (07/03/2012)
Passive Optical Network Protection Switching		8,244,125 (08/14/2012)
Automatically Selecting a Clock Recovery Mode Within Optical Network Terminals		8,244,126 (08/14/2012)

Description	Application Number	Registration Number
Ont-Based Micronode Management		8,249,452 (08/21/2012)
Network Device Authentication		8,312,275 (11/13/2012)
Automatic Control Node Selection in Ring Networks		8,320,282 (11/27/2012)
Inline Packet Replication in Network Devices		8,325,727 (12/04/2012)
Secure DHCP Processing for Layer Two Access Networks		8,341,725 (12/25/2012)
Virtual Snooping Bridge in Computer Networks		8,345,540 (01/01/2013)
Joining Multiple Spanning Tree Networks Across Ring Network		8,355,348 (01/15/2013)
Optical Network Interface Devices and Methods		8,401,387 (03/19/2013)

Description	Application Number	Registration Number
Return Path for Upstream Communications Originating from Optical Node		8,428,465 (04/23/2013)
Optical Network Interface Devices and Methods		8,433,195 (04/30/2013)
System for Correlating a Subscriber Unit with a Particular Subscriber in a Passive Optical Network		8,451,979 (05/28/2013)
Optical Transceiver Assembly		8,463,098 (06/11/2013)
Methods and Apparatuses to Support Multiple Fiber Networking Platforms		8,472,485 (06/25/2013)
Cable Restraint		8,494,335 (07/23/2013)
Network Device Authentication		8,495,371 (07/23/2013)
Automated VLAN Assignment to Domain in Ring Network		8,526,443 (09/03/2013)

Description	Application Number	Registration Number
Protecting Optical Transports from Consecutive Identical Digits in Optical Computer Networks		8,600,057 (12/03/2013)
Multi-Card Network Device Appearing as Single Entity in Spanning Tree Network		8,625,466 (01/07/2014)
Network Interface Device Synchronization		8,630,546 (01/14/2012)
Systems And Methods for Multicast Admission Control		8,660,004 (02/25/2014)
Transparent Clock for Precision Timing Distribution		8,718,482 (05/06/2014)
Protecting Optical Transports from Consecutive Identical Digits in Optical Computer Networks		8,731,198 (05/20/2014)
Ethernet OAM to ATM OAM Interworking for Loopback Capability		8,824,308 (09/02/2014)
Systems and Methods for Measuring Frame Loss in Multipoint Networks		8,848,563 (09/30/2014)

Description	Application Number	Registration Number
Secure DHCP Processing for Layer Two Access Networks		8,862,705 (10/14/2014)
Isolation VLAN for Layer Two Access Networks		8,875,233 (10/28/2014)
Scheduling Delivery of Upstream Traffic Based On Downstream Traffic in Optical Networks		8,917,993 (12/23/2014)
Determining Quality of Experience with a Network Device		8,964,572 (02/24/2015)
Grant Scheduler for Optical Network Devices		8,976,688 (03/10/2015)
Optical Network Device with Multi-Transport Support		8,983,308 (03/17/2015)
Systems and Methods for Measuring Frame Loss in Multipoint Networks		8,989,032 (03/24/2015)
Provisioning Network Devices in Ethernet-Based Access Networks		9,025,951 (05/05/2015)

Description	Application Number	Registration Number
Propagating Link Status Across a Network		9,137,129 (09/15/2015)
Distributed Cache System for Optical Networks		9,137,326 (09/15/2015)
Applying Heuristics to Manage Multicast Subscriptions within Computer Networks		9,294,534 (03/22/2016)
Methods and Apparatuses for Dynamic Backhaul Bandwidth Management in Wireless Networks		9,642,145 (05/02/2017)
Universal Demarcation Point		RE37,125 (04/03/2001)
Return Path Compliance in Networks	12/260,665 (10/29/2008)	
Communication Among Network Devices at Subscriber Premises	13/188,023 (07/21/2011)	
Detecting and Communicating Potential Optical Fiber Issues in Optical Networks	13/595,444 (08/27/2012)	

Description	Application Number	Registration Number
Laser Power Control Using Bias and Modulation Current Feedback	13/725,317 (12/21/2012)	
Network Activation Testing	13/791,560 (03/08/2013)	
Tunable Optical Add-Drop Multiplexer		6,486,462 (11/26/2002)
Free Space Optical "Backplane" (FSO)		6,526,211 (02/25/2003)
Pseudo Master/Slave Decoupling of High Speed Bus Communications Timing		6,553,434 (04/22/2003)
Method and Apparatus to Perform Cell Synchronization in an Asynchronous Transfer Mode Network		6,580,774 (06/17/2003)
Integrated Telephony Subscriber Line Protection and Filter Device		6,606,231 (08/12/2003)
ATM Utopia Bus Snooper Switch		6,618,376 (09/09/2003)


Description	Application Number	Registration Number
Optical Ethernet Overlay for Loop Topology Network		6,623,186 (09/23/2003)
Upstream Scrambler Seeding System and Method in a Passive Optical Network		6,700,903 (03/02/2004)
Generic Interface for System and Application Management		6,725,233 (04/20/2004)
Expanded Addressing for Traffic Queues and Prioritization		6,732,206 (05/04/2004)
System and Method for Selecting Internet Service Providers From a Workstation that is Connected to a Local Area Network		6,748,439 (06/08/2004)
Method and Apparatus for Distributing a Clock in a Network		6,754,745 (06/22/2004)
Fast Threshold Determination for Packet-Multiplexed Digital Communication		6,785,344 (08/31/2004)
Ranging Cell Detection in a Noisy Environment		6,801,547 (10/05/2004)

Description	Application Number	Registration Number
Virtual Local Area Network Protection Switching		6,834,056 (12/21/2004)
Stratum Traceable Clock Driver for Voice Dejittering and Control		6,856,615 (02/15/2005)
Command Line Interface Abstraction Engine		6,907,572 (06/14/2005)
System and Method to Uniformly Access Devices		6,952,830 (10/04/2005)
Adaptive Bit Rate Transponder		6,996,123 (02/07/2006)
Ethernet Based TDM Switch		6,999,450 (02/14/2006)
System and Method for Synchronization of Devices Across a Packet Network		7,103,072 (09/05/2006)
Configuration Management Utilizing Generalized Markup Language		7,155,496 (12/26/2006)

Description	Application Number	Registration Number
Filtering Subscriber Traffic to Prevent Denial-of-Service Attacks		7,379,423 (05/27/2008)
Multi-Stream Jitter Buffer for Packetized Voice Applications		7,463,598 (12/09/2008)
Controlling ARP Traffic to Enhance Network Security and Scalability in TCP/IP Networks		7,490,351 (02/10/2009)
Broadband Loop Carrier System		7,492,761 (02/17/2009)
Controlling ARP Packet Traffic to Enhance Network Security and Scalability in TCP/IP Networks		7,596,693 (09/29/2009)
Device Monitoring via Generalized Markup Language		7,685,508 (03/23/2010)
Fiber Optic Parking Dust Cover		7,706,657 (04/27/2010)
On-Hook Signal Detector		7,756,105 (07/13/2010)

Description	Application Number	Registration Number
Method and System to Facilitate Management of a Distributed Network		7,836,153 (11/16/2010)
Class Loader for Managing a Network		8,010,973 (08/30/2011)
Communication Between Network Interface and Subscriber Devices via Power Supply Lines		8,338,891 (12/25/2012)
Merging Multiple Network Data Flows		8,559,440 (10/15/2013)
Inline Packet Replication in Network Devices		8,837,481 (09/16/2014)
Efficient Management of Ring Networks		9,686,098 (06/20/2017)

EXHIBIT B – TRADEMARKS

Description	Serial Number	Registration Number
E3		4,064,466 (11/29/2011)
B6		4,151,481 (05/29/2012)
E7		3,839,295 (08/24/2010)
E5		3,802,134 (06/15/2010)
C7		3,303,025 (10/02/2007)
		2,707,608 (04/15/2003)
CALIX		2,789,178 (12/02/2003)

Description	Serial Number	Registration Number
OCCAM		1,357,966 (09/03/1985)
OCCAM		1,356,286 (08/27/1985)

EXHIBIT C – COPYRIGHTS

Description	Registration Number	Application Number
None		

EXHIBIT D – MASK WORKS

Description	Registration Number	Application Number
None		